25: Brodrick--109-110 S-3 (1939) 1948 Laotians
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"Some of the Vientiane and the Luang-Prabang temples still contain a number of bronzes, mostly of the Buddha, seated, upright or reclining. These figures, which have only just begun to appear in the European market, are already rather keenly sought after and soon may become quite rare. The Laotian bronzes show a high degree of stylization. The long fingers are as supple as tendrils, while the feet are harsh and squared as though hacked out with a hatchet. The chest is taut and rounded, the waist exceedingly [110]slender. The heads and faces are of the same style as those of the stone or lacquer images we saw at Luang-Prabang. Under the curved nose, the thick lips are pursed up into a rather disdainful pout, which in some statues takes on what must be called a leer. From the topknot flares up a burst of flames conventionalized so as to resemble a budding daffodil--all rather super-realist. (1)

1. The ancient Laotians seem to have been skilled in the difficult art of large-scale bronze-casting. From what remains of the Buddha in the Vat Manorom at Luang-Prabang, the original image must have stood over eighteen feet without its pedestal. Often the Laotian Buddhas have a date engraved upon them but it is only a cyclic era date so that no absolute chronology can be established."

323 The potters' methods and equipment do not differ from those which are in widespread use everywhere.

The method of firing depends on the nature of the article, and firing may be done either in kilns dug out of the clay soil, in the banks of watercourses, or under stacks of rice straw. Wood or rice straw is used to fire the kilns.

In some regions articles are given a shiny black patina resembling graphite by firing them for a second time in paddy husks.

326 778 411 415 **Brass-founding.** One has only to explore the pagodas of Laos in order to realise that brass-founding used to be held in honor. Religious statues can be found which are sometimes of great [458] weight and usually of quite fine workmanship and taste, taking into account, to be sure, the quite special manner in which they conceive esthetics.

Although the crucibles have not been fired for many long years for casting such large pieces, the industry of brass-founding continues to be exercised by a certain number of specialists who are content with producing religious statuettes, necessities for betel, bells for elephants and livestock, various kinds of vases, cuspidors, etc.

This industry is an extremely ancient one in the land. It was certainly practiced during the Bronze Age, as is attested by the spear-heads, daggers, hatchets and halberds which have been found in northern Laos and which can now be seen in the Saint-Germain museum.

[821 172] It is interesting to note that the inhabitants of Laos attribute a meteoric origin to objects of the Bronze Age, as also to those of the Age of Polished Stone. They believe that these objects fall from the sky when it thunders, and that they are produced by lightning.

The following are some of the methods used by Laotian founders. Casting is always done by the lost wax process.

325 532 **Casting statues.** On an initial rough clay model, the artist applies a layer of fine, soft and well-pugged clay which he shapes in a more careful manner. Then after covering the statue, which is already much more than a rough draft, with a layer of bees-wax of the proper thickness, he finishes modeling the statue on the wax, inserting all the details and all the ornaments which it is to include. Polishing a bit here, engraving there, setting precious stones or simply glass between the eyelids to represent eyes, and inserting gold lips where the mouth is to be located, he gives the

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model the appearance which it will have when cast.

On this wax surface a very thin layer is first overlaid of clay which is finely pugged, well diluted with water and quite similar in appearance and consistency to the kaolin from which utensils of thin porcelain are molded. When this [459] [Illustration] [460] [Blank page] [461] first layer is dry, a second is applied which is made up of coarser clay, then a third which is still thicker. Finally, when the whole is no more than a mass which has the vague shape of the original model, a good thickness of fire clay which has been kneaded together with chopped straw, buffalo dung and paddy husks is applied by hand. The mold is then ready for pouring as soon as the outer layer dries.

At certain carefully chosen points in the less conspicuous parts of the model, wax plugs have been inserted at the correct angle through the different layers of clay so that they come out to the surface. Some of these will be vent holes to give passage to the vapors which will be emitted when the statue is cast, and the others are the spouts through which the molten metal will be poured from the crucibles.

The mold has been prepared in an excavation in the ground which is as deep as the statue is tall. When everything is ready, the excavation is filled with dry sand which is well tamped down. Finally the crucibles are arranged all around the mold, in greater or less numbers depending on the size of the object to be cast. Each of these has a bellows and sometimes two so as to be prepared for accidents, to hasten melting and to obtain perfect equality of fluidity and heat in the metal in all the crucibles.

When the time comes the metal is poured into all the spouts at once, and if the mold does not burst because of excess humidity, the bronze soon replaces the wax inside the walls of the mold. It is allowed to cool, then the mold is removed. If the operation is successful the statue then appears, smooth and pure and perfectly identical with the wax model. Only the junction points of the spouts and vent holes need any retouching, but the main parts usually come out admirably well.

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Casting various utensils. Small utensils are cast in just the same way, except that the crucible containing the molten metal is connected to the mold and packed in a common covering--a mixture of buffalo dung, chopped straw and paddy husks. Between the mold and the crucible two small lateral openings have been carefully made, the purpose of which is both to allow vapors to escape and to permit judging the degree of fusion of the metal.

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When thus prepared the mold and the crucible, which form a single block, are placed on the furnace with the crucible undermost, amidst the charcoal which is given a forced draft with an alternating bellows. What happens then cannot be imagined. The wax melts with the first heat and falls into the crucible, leaving a void between the two walls of the mold which the metal will fill. As soon as the latter is ready, as can be seen by the color of the flames which come out through the lateral openings, the founder seizes the block with a pair of tongs and turns it upside down suddenly so as to pour the contents of the crucible automatically into the cavity of the mold. After the metal has cooled the clay envelope is broken like an egg shell, and the object appears with the shape and relief or chased ornaments which the wax model possessed.

The founders use various alloys, depending on whether the objects which they are making are statues, common utensils or bells. Some are made of brass, zinc and tin, others of red copper, silver and
[778] bronze from old gongs, etc. Sometimes, when the statue is a religious one, the faithful are impelled by their ardor to throw gold and silver jewelry and coins into the crucible.

The principal pieces of equipment of the founder are the bellows, crucibles, tongs, a series of sculptor's boasters, an alternating turn-bench, graving tools, scrapers, hammers, etc.

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Basketry. The inhabitants of Laos, especially the Khas, are past masters in the art of basketry, and the objects which come from their hands have a finish, a delicacy, a seal of elegance and a purity of form which are surprising at first sight.

Rattan, certain kinds of bark and thin skins and strips of bamboo are the materials used in basketry.

The main articles produced by this industry include floor mats, bed mats, calibrated baskets for measuring grain, buckets for drawing water, large baskets, baskets for holding cooked rice, platter covers, trays with feet, boxes for betel necessities, baskets to carry on the back, bird cages, hats, etc.

[463] Most basketwork articles are delivered unfinished, although some are smoked or else lacquered black or red. Except for a few articles which find a market outside of the region of manufacture, but always within the limits of Laos, it may be said that the basketwork industry is an entirely local one.

The Khas, moreover, do not have a monopoly in this industry, and all the inhabitants of Laos are basket makers to a greater or less degree.